

# **The causes of female legislative turnover in western Europe 1945-2015: Do explanations of turnover differ by gender?**

**By Athanassios Gouglas, Bart Maddens, Marleen Brans**

**KU Leuven Public Governance Institute**

**Paper submitted for**

**5th European Conference on Politics and Gender (ECPG)**

**University of Lausanne, Switzerland, 8–10 June 2017**

**Work in progress. Do not cite without authors' permission.**

## **INTRODUCTION**

In the present paper we explore the causes of female legislative turnover in eight west European legislative chambers in the period from 1945 to 2015. Female turnover refers to the number of new female legislators, expressed as a proportion of the total number of members of parliament (MPs) who enter the legislature after general elections. The topic is socially significant and scientifically topical from the perspective of both political elite circulation research and gender and politics studies. To begin with, legislative turnover of both male and female MPs (total turnover) is a 'kind of seismograph' that detects shifts in the composition of political elites and consequently in the foundations of politics and polity (Putnam 1976). It is also a 'democratic thermometer' measuring the quality and competitiveness of democracy to the extent that democracy is perceived as the organization of the alternation in power (Crowther and Manytone 2007). Past research reveals that the causes of total legislative turnover have been extensively studied, especially in the US context and increasingly so in the European one too (Manow 2007, Heinsohn and Freitag 2012, Heinsohn 2014, Gouglas, Maddens, Brans 2016). However, the gender dimension of the phenomenon and female turnover in particular is largely under-researched. From a purely political elites circulation perspective an interesting question is the following. Do explanations of the political alternation of women MPs in legislatures differ than those of men? And what can we learn about the determinants of legislative turnover through the study of its gender dimension?

Beyond its importance for the study of the circulation of political elites, female turnover is also important from a purely gender perspective. The number of new women MPs entering parliament after general elections is the thermostat of female representation. Female representation refers to the total number of women MPs as a proportion of the total number of MPs in the legislature. It is the sum of re-elected women incumbents and women newcomers. Evidently, the number of women newcomers after general elections sets the upper limit to the total number of women MPs in parliament, thus delimiting the ceiling of female descriptive representation. A very low inflow of new women lawmakers keeps the overall number of women MPs low. In order to reach the target of gender balanced assemblies and given the historical starting point of male only legislatures there needs to be a continuous inflow of new women

MPs. In view of the above, the gender related research question driving the present study is what explains variability in the influx of new women MPs in parliament across country, across time?

In order to answer the above stated questions we bring together a unique longitudinal dataset on total legislative turnover and gender turnover in Europe. The dataset combines original information on turnover in eight European unicameral or lower chambers in the period from 1945 to 2015. Our analytical framework combines legislative turnover theory with the insights of female representation research. In terms of variables, it comprises original information on MP remuneration with existing data on strength of bicameralism, regional authority, duration of legislative term, party ideology, diffusion of gender quotas, electoral volatility, district magnitude and strength of personal vote.

The paper will proceed as follows. First, we discuss the concept of legislative turnover and highlight the challenge of gender. Second, we present a framework explaining female legislative turnover and how this relates to explanations of total and male legislative turnover. Third we present our research design. Fourth, we provide a comparative descriptive analysis of turnover trends in time. Fifth, we extend our analysis using quantitative methods. We conclude with a discussion of our findings and suggest paths for future research. In this final part we confirm some findings from earlier work on turnover and highlight some novel insights on the differences between explanations of female and male turnover, which to our knowledge was not shown in a comparative setting before.

## **LEGISLATIVE TURNOVER AND THE CHALLENGE OF GENDER**

Legislative turnover refers to the percentage of membership change in parliament after general elections. Although total turnover has been extensively studied (Hyneman 1938; Oden 1965; Ray 1974; Rosenthal 1974; Collie 1981; Somit et al. 1994; Moncrief 1998; Swain et al. 2000; Matland and Studlar 2004; Moncrief et al. 2004; Crowther and Matonyte 2007; Manow 2007; Heinsohn and Freitag 2012; Kuklys 2013; Heinsohn 2014; Verzichelli 2014; Francois and Grossman 2015; Gouglas, Maddens, Brans 2016; Gouglas and Maddens 2017) its gender dimension remains largely under-researched. When it comes to women legislators, the bulk of research focuses primarily on the levels of female representation in parliaments (Andersen and Thorson 1984, Darcy and Choike 1986, Darcy 1988, Matland 1993, 1998; Matland and Studlar 1996; Caul 1999; Kenworthy and Malami 1999; Reynolds 1999; Paxton and Kunovich 2003; Meier 2004; Paxton, Green and Hughes 2008; Tripp and Kang 2008; Rosen 2012; Thames 2016; Pruysers and Blais 2016).

In the present study we aim to cover this empirical gap. We aim to investigate the causes of female turnover and whether they are different than those of male turnover. A first question is how do we approach turnover? The literature reveals that approaches and measures of turnover differ. Some researchers focus on the fates of incumbents. For them the interesting questions revolve around membership stability and the challenges caused by the ‘victorious incumbent’ (Somit et al 1994). They measure turnover by counting incumbents exiting parliament, or by incumbents succeeding to return. Others approach the topic through the eyes of non-incumbents. For them the interesting questions revolve around change and renewal of the elite. They count newcomers entering parliament.

We define female legislative turnover as the number of new female legislators, expressed as a proportion of the total number of members of parliament (MPs) who enter the legislature after

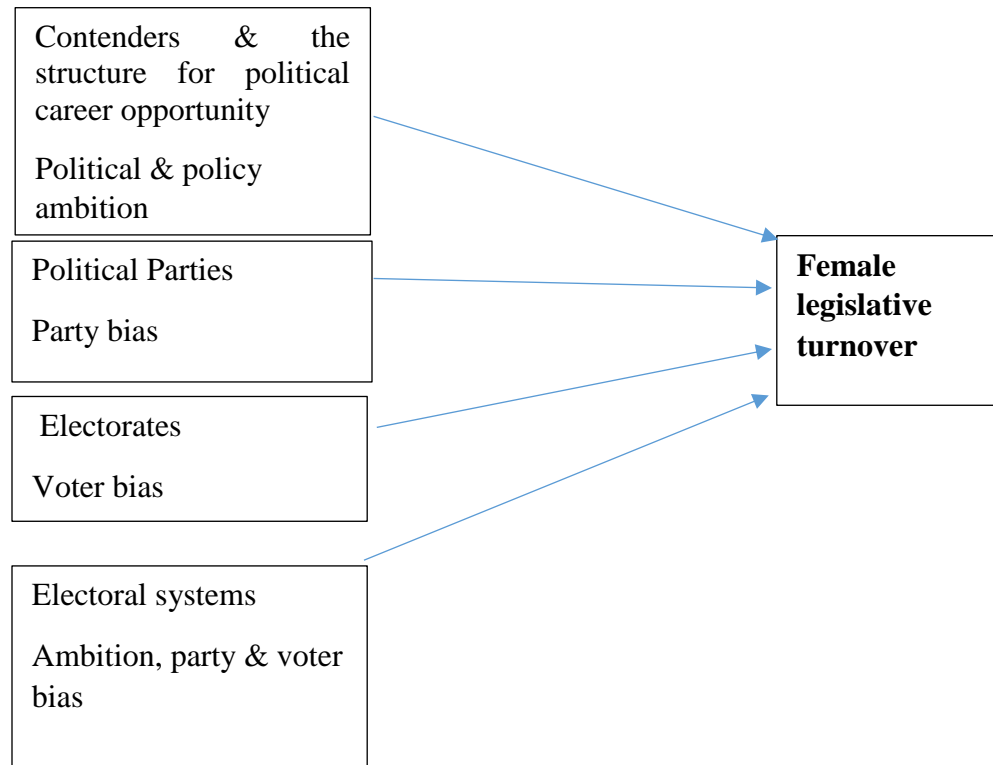
general elections. Our interest lies with women newcomers, not the fate of women incumbents. We adopt the same approach for total and male turnover. We take this approach because the number of extra women legislators entering parliament after elections sets the upper limit to the total number of women in parliaments. It is the thermostat of female representation. If new women MPs, extra to the number of female incumbents, don't enter legislative politics then the total number of women in parliament will never reach that of men. In this respect it is important to know what determines fluctuations in the rate of women newcomers in parliament.

We will answer the above stated questions drawing on two bodies of literature: legislative turnover and female representation. Our theoretical starting point is that female membership change is part of the broader phenomenon of membership change in parliaments. Much like legislative turnover in general, female turnover too can be seen as the end result of a 'representative elite production process' (Best and Cotta 2000). Adopting the Best and Cotta (2000) framework, Gouglass et al (2016) conceptualized this process as involving four main elements: the structure of political career opportunities, which shapes the supply of aspirants; party selectorates, which shape the demand for candidates; electorates, which shape the demand for MPs; and the electoral system, which structures the choices of all of the above mentioned actors, as well as mechanically translates votes into seats.

In a world where there are no gender differences we would expect the relative importance of those factors (and the associated causes) to be the same for female, male and total turnover. We have reasons to believe that this is not the case. To begin with, explanations of the variability of total turnover across time is suspect of a male turnover bias. They explain turnover in legislatures that for their most part in the 20<sup>th</sup> century have been dominated by men (and most still are), their gender composition only changing very gradually. As a result they tend to mirror the phenomenon of male turnover, while blurring the distinct dynamics of female representative elite circulation.

Added to the above, the literature on female representation awakens us to certain important gender relevant realities / biases. There are four such gender biases of relevance. According to some studies, men exhibit more political career ambition than women (Carroll 1985; Fox and Lawless 2005; Lawless and Fox 2005; Pruysers 2016), but women seek more policy influence (Bledsoe and Herring 1990; Consantini 1990; Lawless and Theriault 2005). Other studies highlight that political parties perpetuate a male bias when it comes to candidate selection (Duverger 1955, Niven 1998), however, fast track equality policies like gender quotas have institutionalized a female advantage in the form of measures of affirmative action (Dahlerup 2006, Tripp and Kang 2008). Moreover, some studies claim that voters can be biased toward women candidates (Foucault 2006; Frechette, Maniquet, Morelli 2008; Pearson and McGee 2013). Last, but not least, women's participation in politics is particularly sensitive to the effects of electoral institutions (Darcy and Choike 1986; Darcy 1988; Matland 1993, 1996; Matland and Studlar 1998, Thames and Williams 2010, Thames 2016). Whether electoral systems work to the advantage or the disadvantage of women will depend on the extent to which electoral systems encourage women to stand for office, as well as the extent to which they entrench or prevent party and voter biases. If the above biases stand, we would expect the causes of female turnover to differ in comparison to those of male and total turnover. It is for this reason important to discern turnover according to gender and investigate whether the causes of female turnover are different to those of male and total turnover and in which respect.

Figure 1: Female legislative turnover process



## ANALYTICAL FRAMEWORK: DEPENDENT AND INDEPENDENT VARIABLES AND HYPOTHESES

The present study has three dependent variables: total legislative turnover, male and female turnover. The main dependent variable is female legislative turnover defined as the number of new female MPs as a proportion of total parliament membership after general elections. Women newcomers include both first-entry MPs and returning old timers who were not elected in the previous general election. In this respect we measure what Francois and Grossman (2015) would call the rate of female ‘political alternation’. Total legislative turnover is measured as the proportion of all newcomer MPs (first-entry and returning) irrespective of gender, who enter parliament after general elections. Male legislative turnover is measured as the proportion of new men MPs (first-entry and returning) who enter the legislature after general elections.

In seeking to explain cross-national variations we will use the analytical framework outlined in the previous section, which identifies four components of the representative elite production process. Thus we organise the independent variables into four theoretically relevant blocks (table 1): the structure of political career opportunities; political parties; voters; electoral systems. Every component - block is associated with a broader gender turnover related hypothesis. Table 1 summarises the dependent variables and their operationalisation, as well as the independent variables and their predicted effects.

Table 1: Variables and hypotheses

Dependent variables	Control dependent variables	Main dependent variable	Gender differences	Operationalisation
	Legislative turnover Male turnover	Female turnover		[No. of first-entry MPs plus returning (total, or male, or female) / No. of parliamentary seats) * 100
Blocks of IVs	Control hypothesis	Main hypothesis		
Block 1: structure of opportunity	Career politicians	Limited ambition Policy influence		
MP remuneration	As MP/GNI ratio increases, total and male turnover increases	As MP/GNI ratio increases female turnover decreases	Yes direction	Ratio of annual MP remuneration to gross national income per head
Duration of legislative term	Lengthy terms increase total and male turnover	Lengthy terms have no effect on female turnover	Yes direction	Number of days between elections
Strength of bicameralism	Strong bicameralism increases turnover	Strong bicameralism increases female turnover	No, but different causal path	Dummy variable: 0 = weak or no bicameralism, 1 = strong bicameralism
Regional authority	The higher the regional authority, the higher the total and male turnover	The higher the regional authority, the higher the female turnover	No, but different causal path	Regional Authority Index
Block 2: political parties	Party bias (male conspiracy)	Party bias (female advantage)		
Party ideology	As % of leftist parties in parliament increases total turnover increases, but male turnover decreases.	As % of leftist parties in parliament increases female turnover increases	Yes direction	% of seats held by leftist parties
Gender quotas	Diffusion of GQs increases total turnover and decreases male turnover	Diffusion of GQs increases female turnover	Yes direction	% of seats held by parties with GQ rules
Block 3: electorates	Volatile electorates	Hostile electorates		
Electoral volatility (V)	As V increases, total and male turnover increases	As V increases female turnover increases but less than male turnover	Yes size of effect	Pedersen Index
Block 4: electoral systems	Incumbency (dis)advantage	Party strategies & voter bias		
District magnitude	As district magnitude increases, total turnover increases, but have no effect on total turnover	As district magnitude increases, female turnover increases	Yes direction	Average district magnitude size in the first tier
Strength of personal vote	Strong personal vote systems decrease male turnover, but have no effect on total turnover	Strong personal vote systems decrease female turnover	Yes direction	Dummy variable: 0=weak personal vote, 1=strong personal vote

## **Component 1: The structure for political career opportunities and individual ambition**

Turnover starts with the decision of aspirants to stand for election, as well as that of incumbents to be mobile, either by taking an alternative political career route, or even by exiting politics. Such decisions are linked to individual motivation, which is ‘shaped, ordered and structured by its institutional context’ (Norris 1997, p. 13). The institutional context of political careers has been termed the ‘structure of opportunities’ (Schlesinger 1966). Different institutional contexts of political careers create different flows of lawmakers moving vertically and/or horizontally in the political market (Gouglas et al. 2016). When it comes to gender, there is a long history of empirical research demonstrating that women exhibit less political career ambition and thus political motivation than men (Carroll 1985; Fox and Lawless 2005; Lawless and Fox 2005; Pruysers 2016). Moreover, it has also been shown that women value policy influence more than status. When their ability to contribute to policy making stalls they are less inclined to stay in power (Bledsoe and Herring 1990; Consantini 1990; Lawless and Theriault 2005). If this is true we would expect that different structures of opportunity would have different effects on female than on male MP renewal. The literature reveals that there are numerous components of the institutional context of political careers. We discerned four core components of the institutional context of political careers: material rewards for office, duration of the legislative term, internal structure of the legislature and state structure (Norris 1997, p. 11, Borchert 2003, p. 12). Consequently, we formulated four relevant hypotheses.

**H1:** Higher MP wages increase total and male turnover, but decrease female legislative turnover

Material rewards for office influence political career decisions and consequently turnover (Hyneman 1938, Ray 1974, Rosenthal 1974, Squire 1988, Norris 1997, Borchert 2003). Gouglas et al. (2016) have recently shown that when wages in the political sector increase, political competition increases, leading to an increase in total turnover as more non-incumbents storm into legislative politics (entry-effect). According to the political career ambition hypothesis, we would expect men to be more sensitive to wage increases in the political sector than women. The supply of male non-incumbent candidates would be expected to increase, but women non-incumbents would not storm into politics simply on the basis of higher wages in the political sector. Moreover, male incumbents would want to retain their position on the basis of increasing financial rewards, much more than women incumbents who would rather see their policy influence increase. This in turn means that higher wages in the political sector increase competition and exercise undue pressure to women candidates from both male incumbents and non-incumbents. In view of this, we would expect that higher MP wages would decrease the number of women new MPs as a proportion of total house membership (retention effect), while it would increase that of men (entry-effect). We test this hypothesis by using the MP wages to GNI remuneration ratio found in the ParlTurn dataset (Gouglas et al. 2017).

**H2:** lengthier legislative terms increase total and male legislative turnover, but have no effect on female legislative turnover

The literature reveals that lengthy legislative terms increase legislative turnover (Matland and Studlar 2004; Manow 2007; Heinshon 2014; Francois and Gossman 2015; Gouglas et al. 2016). The likelihood that an MP will look for new challenges and switch careers, it is argued, increases with the duration of the legislative term. We would expect this not to be the case for women legislators. Work and the policy challenges associated with a longer term would have a greater

appeal when it comes to the retention of female legislators who would want to retain their seats against competition from both men and women candidates. Thus we expect lengthier terms to have no effect on female turnover. We measure the duration of a legislative term as the number of days between two general elections.

**H3:** strong bicameral chambers increase total, male and female legislative turnover

The number and strength of legislative chambers determine both the chances of someone becoming a legislator as well as the options of moving upward within parliament (Borchert 2003, p. 12). Strong bicameralism increases the odds that incumbent MPs will want to transition from the lower to the upper chamber. This movement from the lower to the upper chamber constitutes a move up the political career ladder. This is an option most valued by men. However, when the chambers are at parity it also expands the arenas for policy influence opportunities. This is an option most valued by women. Although differently motivated, this upward motion leaves vacated seats behind. Men and women non-incumbents would be expected to hop into these vacated seats<sup>1</sup>. Thus, all types of turnover would be expected to increase. We measure the strength of bicameralism as 0,1 dummy variable using historical data from the Comparative Political Science dataset (Armigeon et al. 2016). Unicameral and weak bicameral parliaments are coded 0, while strong bicameral parliaments with chambers at parity level are coded 1.

**H4:** regional authority increases aggregate, male and female legislative turnover

The way a state is structured defines the offered political career paths (Norris 1997, Borchert 2003, p. 12). The issue is not simply one of federal versus unitary states. Rather than territorial organization the key here is the actual status and authority of the subnational levels. As regions gain authority and status, and regional legislative assemblies become more powerful, there arise opportunities for political career advancement and policy influence expansion without clear upper and lower career paths (Fiers 2001; Borchert 2011). In such multilevel systems we would expect both men and women politicians to ‘level hop’ across levels (Fiers 2001, Borchert 2011, Pilet, Tronconi, Onate, Verzichelli 2014). Moving down to the regional level would not be a demotion for men incumbents, while women incumbents would value the expansion of policy influence at the regional level. The vacated seats would be filled in by both women and men newcomers.<sup>2</sup> Thus all types of turnover in the legislature would be expected to increase. We measure regional authority with the regional authority index (RAI) developed by Hooghe, Marks, Schakel, Chapman, Niedzwiecki and Shair-Rosenfield (Hooghe et al 2016).

## **Component 2: Political party selectorates and party bias**

Once they have decided to stand for election aspirants have to be selected as candidates by their party in order to realize their ambition. Selection, though, can be biased on the basis of gender. Party bias can go either way: a) attitudes resembling what Duverger (1955) termed a ‘male conspiracy’ against women, or b) equality policies favouring women. Explaining male party bias, Niven (1998) argued that within political parties, women are thought to constitute an

---

<sup>1</sup> Moreover, since the two chambers are at parity, there is also the theoretical possibility of upper chamber legislators moving to the lower chamber. Our data corroborates that this happens, although more rarely.

<sup>2</sup> Moreover, we would expect some of the legislators who have hoped to the regional level to return back to the national one if an opportunity arises, or party strategy demands it.

‘outgroup’ in comparison to the ‘ingroup’ of male political elites. Therefore, they are often judged as less politically capable candidates and they are either not selected to stand for office, or placed in non-realistic list positions and less favourable single member districts. Political party ideology has traditionally played an important role in remedying such outgroup effects by promoting gender equality policies. Since the 1980s and the 1990s, the role ‘to recruit, nominate or select more women for political positions’ has been assumed by gender quotas (Dahlerup 2006, p. 6). Viewed under this light party bias associated with ‘male conspiracy’ appears to be counterbalanced by equality policies that create female advantage. Two hypotheses of relevance.

**H5:** An increase in the share of assembly seats controlled by leftist parties increases female legislative turnover, decreases male turnover and has no effect on total turnover

The literature reveals that party ideology has no effect on legislative turnover (Matland and Studlar 2004, Gouglas et al. 2016). This, we argue, is a technical not a substantive result. It happens because party ideology effects are neutralized at the aggregate assembly level (Francois and Grossman 2015). We expect party ideology to be a strong predictor of both male and female turnover, but in different directions. Equality policies have historically been promoted by parties on the left and social-liberal parties (Dahlerup 2006, p. 10). Such left and social-liberal parties are traditionally more open to gender equality and more likely to select bigger numbers of new women candidates to stand for office (Caul, 2001; Norris, 1985; Reynolds, 1999; Rule 1987). In view of this, we would expect that as the parliamentary strength of leftist parties increases, female legislative turnover would rise too. In the meantime we would expect the influx of new male MPs to decrease. We calculate the proportion of seats held by legislators of leftist parties using data on party seats and the political parties’ Left-Right continuum in the ParlGov dataset developed by Döring, Holger and Manow (2015). Parties that score below 5 in the L-R 10 point scale are counted as progressive parties.

**H6:** The greater the diffusion of gender quotas across parliamentary parties the higher the total and female legislative turnover, but the lower the male turnover

The effects of gender quotas are extensively studied in the female representation literature (Freidnvall 2003; Dahlerup 2006; Tripp et al. 2006; Tripp and Kang 2008), but heavily under-researched in legislative turnover studies. According to one such study to hand, total legislative turnover increases when quotas are implemented by a parliamentary party that holds more than 15% of the seats in parliament (Gouglas et al. 2016). We expect gender quotas to increase female turnover, while decreasing the influx of new male legislators. How? Gender quotas open up the ‘secret garden’ of political party nominations by forcing selectorates to nominate more women candidates (Dahlerup 2006). Given the low levels of female representation quotas bring to the electoral landscape increasing numbers of new women candidates. An increase in the total number of new women candidates can lead to substantive increases in the proportion of new elected women legislators (Darcy and Choike 1986, Darcy 1988). To begin with, competition from new male candidates is reduced. Second, intraparty candidate turnover increases to the advantage of new women candidates. Third, though more rarely, intraparty incumbency turnover may increase to the disadvantage of male incumbents. The literature reveals that quotas have significant but smaller effects at the time of their adoption, but their main consequences play out over time (Thames 2016, p. 21). Thus we would expect quotas to increase female legislative turnover when they are in effect by parliamentary parties at any one time. As they are diffused across parliamentary parties the influx of new women candidates and eventually legislators



would be expected to increase, while that of men would be expected to decrease. We measure diffusion of quotas as the percentage of seats held by parties who apply a gender quota rule. If quotas are legislated at the national level we take into consideration the proportion of seats held by the parliamentary party that has actually implemented the quota regulation. In this respect we deal with cases, like in France, where parties prefer to be fined rather than implement the legislated parity rule. As is the case with the first hypothesis data on quotas were collected from the Global Database on Quota for Women (Quota Database 2016).

### **Component 3: Electorates and voter bias**

Once they have been selected to stand for office, candidates compete during general elections. The choices voters make at the ballot box represent one of the most common sources of political alternation in parliaments. Such choices represent preferences for parties and/or candidates. Election, though, much like selection can also be biased on the basis of gender. Voter bias means that electorates are more hostile to women candidates, thus creating a male advantage among candidates with otherwise similar characteristics. The extent of voter bias against women in politics is contested. On one hand the conventional wisdom is that men and women perform equally at the ballot (Smith and Fox 2001; Black and Ericson 2003; Anzia and Berry 2011). On the other hand, recent studies have cast doubt on such claims (Foucault 2006; Frechette, Maniquet, Morelli 2008; Pearson and McGee 2013). If voter bias is present, we would expect it to make women candidates (incumbents and non-incumbents) easier to defeat in comparison to men candidates (incumbents and non-incumbents). Given the absence of data on voter candidate preference volatility we formulated only one electorate relevant hypothesis focusing on party preference swings<sup>3</sup>.

**H7:** Electoral volatility increases total, male and female turnover, but its effect on female turnover is smaller

Electoral volatility is one of the strongest predictors of legislative turnover in all studies. According to Darcy (1988) changes in voters' party preferences create opportunities for newcomers, including women. Simply put, when voter shares change party hands the opportunity arises for both men and women candidates to enter legislative politics. In view of this, we would expect that as electoral volatility increases, female legislative turnover would increase too. However, according to the voter bias theory some residual portion of the electorate remains unreconciled to changes in gender roles. Such biased voters, although they might change party preference, they might not opt for a female candidate. Women candidates might be disadvantaged in comparison to their men colleagues. This in turn could result into more substantial increases in the numbers of new men lawmakers entering parliament than in the numbers of new women legislators. We measure volatility using the Pedersen index V.

---

<sup>3</sup> Evidently, by focusing only on electoral volatility it is hard to discern the extent of voter bias against women. We can nevertheless measure the extent to which women non-incumbents benefit from voter party swings in comparison to men.

#### **Component 4: Electoral systems: between newcomer facilitation and incumbency advantage**

Electoral systems are a crucial component of the elite production process. Beyond their mechanical effect of translating votes into seats, they structure the choices of all the main actors in that process: they can encourage or discourage individual motivation to stand for office; they can determine the chances someone has to become a candidate by shaping party selectorate strategies; they can determine the chances someone has to become a legislator by delimiting voter choice. In this respect, electoral systems potentially incorporate all types of gender related biases within them. This in turn means that we would expect electoral systems to have different effects on male and female turnover. The literature documents that proportional representation list systems elect a greater proportion of newcomers than single member district ones. The same holds true for the total number of women in parliament (Duverger 1955; Lakeman, 1976; Engstrom, 1987; Rule 1987; Matland 1993, 1998; Matland and Studlar 1996; Kenworthy & Malami 1999; Reynolds, 1999, Htun & Jones 2002; Thames 2016). However, proportional representation systems can vary substantially in a number of areas (Thames and Williams 2010, p. 1579, Verzichelli 2014, Gouglas et al. 2016). As a consequence ‘not all aspects of the proportional representation system will work to the advantage of women and not all aspects of the single member district system will work to their disadvantage’ (Darcy 1988, p. 64). We thus need to focus on specific electoral system dimensions. Based on what we know from past empirical studies on turnover and female representation we decided to examine two main aspects of the electoral system: district magnitude and strength of personal vote.

**H9:** The higher the mean district magnitude in the first tier, the higher the total and female turnover, but there is no effect on male turnover

District magnitude refers to the number of seats per district. The higher the district magnitude the higher the legislative turnover. The finding is well documented in the legislative turnover literature (Niemi and Winsky 1987; Crain 1977; Reed 1994; Moncrief, Niemi and Powell 2004, 2008; Gouglas et al. 2016). There are three reasons for this. First, incumbents in multimember districts appear to exit legislative politics more often because relations with the constituents are less satisfactory than in single member districts (Moncrief, Niemi and Powell 2004, p. 372) while campaigns too are more costly (Winsky 1987). To the extent that dissatisfied incumbents exit, the vacated seats would be expected to be filled rather mechanically by men and women newcomers. The individual ambition hypothesis tells us nothing about gender differences in individual satisfaction due to district magnitude, thus we expect no gender turnover differences on the basis of this causal path. Second, election strategies change as district magnitude increases (Matland and Brown 1992, Matland 1993, p. 738). More seats per district means that parties enjoy more opportunities to balance their tickets with new candidates. As district magnitude increases parties do not simply want to win, but to increase their margin of victory. This leads them to include new candidates in order to increase their appeal to as many voters as possible. These new candidates can be both men (of different ethnic origin, age, or socio-occupational background) and women (Matland and Studlar 2004, Thames and Williams 2010, p. 1579, Gouglas et al. 2016). However, given that women constitute one out of two voters we would expect parties to table more women candidates than men and this practice to be diffused across parties (Matland and Studlar 1993). As Gallagher (1988, p. 268) pointed the evidence suggests that ticket balancing appears to be much more relevant when it comes to gender than when it comes to age or other characteristics of aspirants. The third reason is mechanical. Both men and

women non-incumbents can do better in bigger constituencies because there are more marginal seats. Non-incumbents can enter the legislature through the marginal seats that open up because of electoral shifts. This is known to be particularly the case for women (Engstrom 1987, Darcy 1988). Since parties balance their ticket with more women non-incumbents than men, women non-incumbents would be expected to win more marginal seats. Thus for all of the above reasons, we expect district magnitude to increase total turnover and in particular female turnover. However, we expect no effect on male turnover. To test the hypothesis, we collected data on average district magnitude before elections in the first tier, using information from the Database of Electoral Systems (Pilet, Renwick, Núñez, Simón 2016).

**H10:** Strong personal vote systems decrease female turnover, increase male turnover and has no effect on total legislative turnover

Strength of personal vote refers to the propensity of an electoral system to value more personal than party reputations (Carey and Shugart 1995). In systems where the value of the personal vote is high, incumbents benefit from having developed a reputation for being good constituency members, as well as from having resources at their disposal thanks to their elected office. This influences turnover via two channels. First, during selections. Incumbents face a lower risk of deselection by the nominating bodies<sup>4</sup>. Second, during elections. In strong personal vote systems, where campaigns are also more personalised (André, Freire, Papp 2014), a higher reputation and larger resources can tip the balance in favour of the incumbent and against challengers from the same or opposing parties. Normally, we would expect both men and women incumbents to benefit from high personal vote strength. However, strong personal vote systems are also systems where voters are more inclined to vote on the basis of candidates' personal characteristics. In the presence of voter bias, this means that the advantages associated with incumbency could be overturned by an electorate that is hostile to women. In view of this, we would expect women incumbents in strong personal vote systems to be more vulnerable to voter preferences. Moreover, in the presence of voter bias in strong personal vote systems, women incumbents risk of losing their seat to men rather than women non-incumbents. Thus, as the importance of the personal vote increases, we would expect male turnover to increase and female legislative turnover to decrease.

How do we measure strength of personal vote? Carey and Shugart (1995) argued that the propensity of an electoral system to create personal vote incentives can be measured on the extent to which parties control nominations (ballot), candidates benefit from the pooling of votes across the party and other candidates (pool), voters cast a vote for a party or a candidate<sup>5</sup>. The measures were later refined by Wallack et al. (2003) and Johnson and Wallack (2008) and calculated in the form of an index of particularism. As the index has only been calculated since

---

<sup>4</sup> However this dimension should not be overemphasized as incumbents in all systems are very rarely deselected or prevented from standing for re-election (Matland and Studlar 2004).

<sup>5</sup> Another dimension of personal vote is its relationship with district magnitude. As Carey and Shugart (1995, p. 418, 430, 431) argued district magnitude also produces personal vote effects. DM affects personal reputations depending on the value of the ballot. In systems where there is no intra-party competition (for instance single member districts) as M grows (towards closed list systems) the value of personal reputations shrinks. Conversely, in systems where there is intra-party competition as M grows so does the value of personal reputation. 'The effect of M on the value of personal reputation is driven by the imperative (or lack thereof, in closed list systems) of politicians to distinguish themselves from their co-partisans in order to be elected' (Carey and Shugart 1995, p. 431). In view of this we created an interaction term between the centered value of the average district magnitude and strength of personal vote. The interaction term has no significance when regressed on any of the dependent variables.

1978 and not for all countries, we looked for an alternative measure. In their study on legislative turnover Matland and Studlar (2004) argued that a distinction between proportional representation systems (PR) and majoritarian ones will suffice. We suggest something a little bit more refined. Not all list-PR systems are weak in relation to personal vote incentives. When considering the likelihood of a perceived personal vote there is a useful distinction to be made between open, flexible, closed list multimember systems and non-list single member ones. Personal vote is strong in open-list multimember and non-list single-member district systems. It is weak in flexible and closed-list systems multimember district systems.<sup>6</sup> Weak personal vote systems were coded as 0, strong ones as 1. Information on the electoral system, its ballot structure and its changes in time were collected from the Database of Electoral Systems (Pilet, Renwick, Núñez, Simón 2016).

## DATA, CASES AND ANALYTICAL METHOD

Our study focuses on total, female and male gender turnover in eight legislative chambers in western Europe for the period 1945-2015. These are the lower or unicameral chambers of Austria, Belgium, France, Italy, the Netherlands, Sweden, Switzerland and the UK. We selected our cases on both methodological and pragmatic grounds. Our intention was to cover legislative chambers in established European democracies for the whole period since the end of the Second World War. This automatically left out countries that experienced spells of undemocratic rule in both Europe's south, center and east. Evidently, even within the remaining west European established democracies there was a trade-off between the number of countries we could cover and the period we could go back in time. The dataset comprises 152 cases of turnover after general elections. However, we only focus on 145 cases for two reasons. First, in Switzerland women were given the right to stand for election as late as 1971. Second, the French 1958 election, the first of the fifth republic, is a theoretical and statistical outlier that exerts undue influence on the model.

To investigate which components and in particular which predictors best predict total, male and female turnover we used OLS (hierarchical – blockwise-entry) regression analysis. The selected predictors are sequentially entered in blocks (table 1). Every block in the hierarchy represents a theoretically important component in explaining turnover and it is also associated with a major gender turnover related hypothesis (Table 1). The model was run for all newcomer MPs, then separately for women and men to see if the causes explaining their entry to parliament are different (Table 1). To begin with, we analyse total legislative turnover. To a certain extent this is a replication of the Gouglas et al. (2016) analysis. Certain variable specifications are different though. We measure the diffusion of gender quotas across the party system as a continuous and not as a 0,1 dummy variable. Last but, not least, the sample is reduced to 145 cases. As a next step, we perform another control analysis, this time on male legislative turnover. Following this, we analyse our main dependent variable, female legislative turnover, so as to be able to compare it with both the total and the male legislative turnover rates.

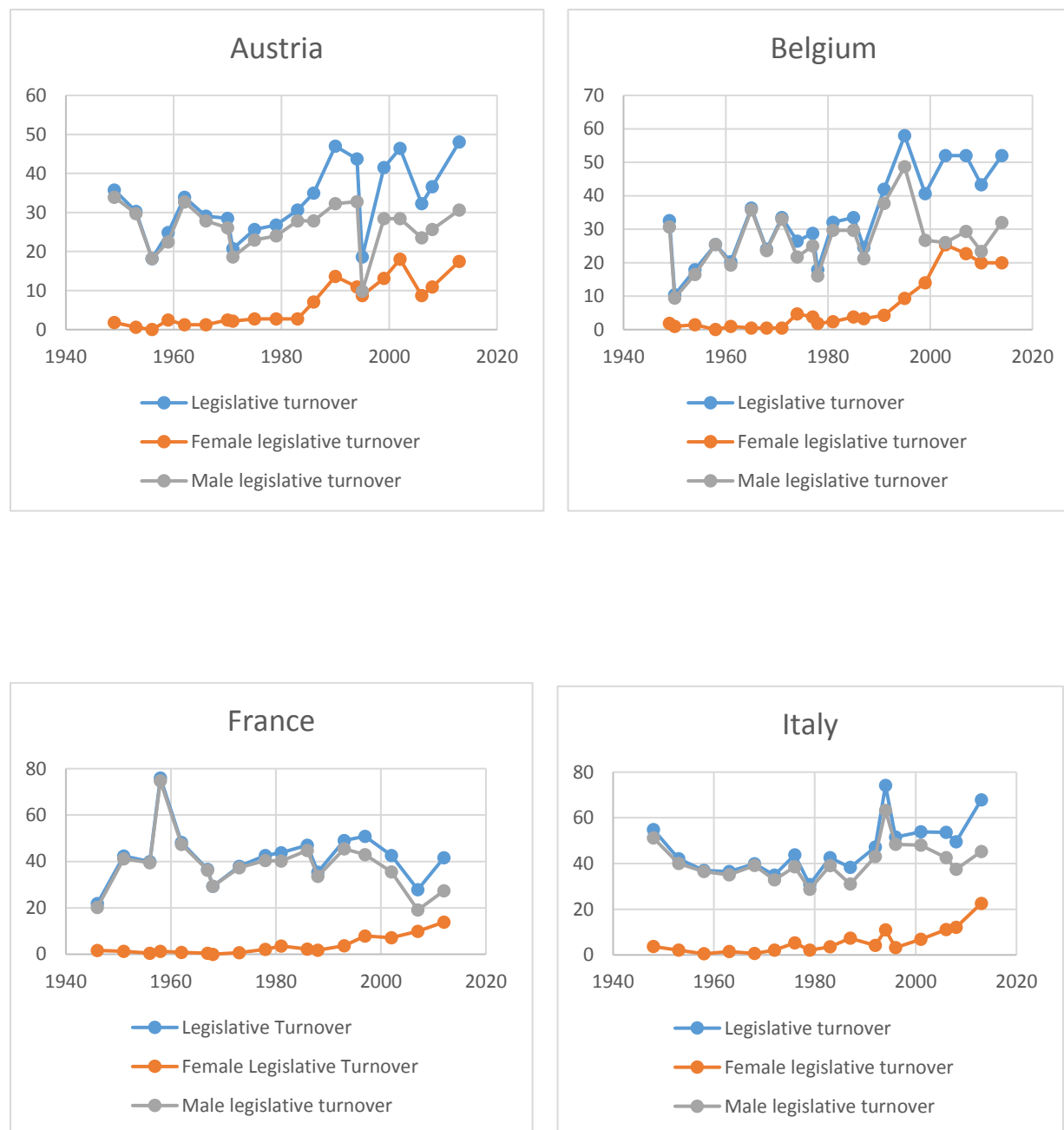
---

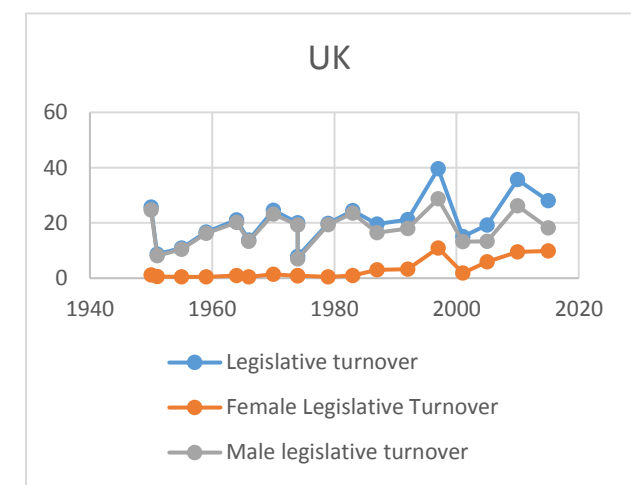
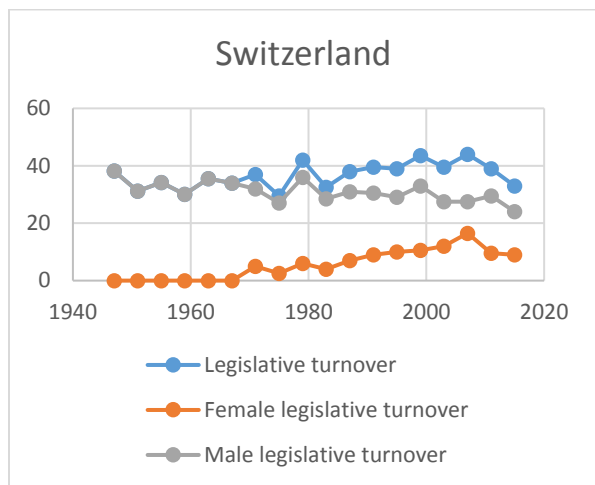
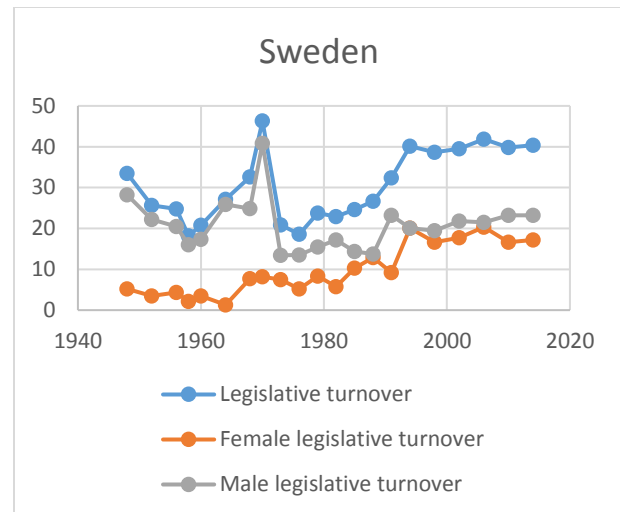
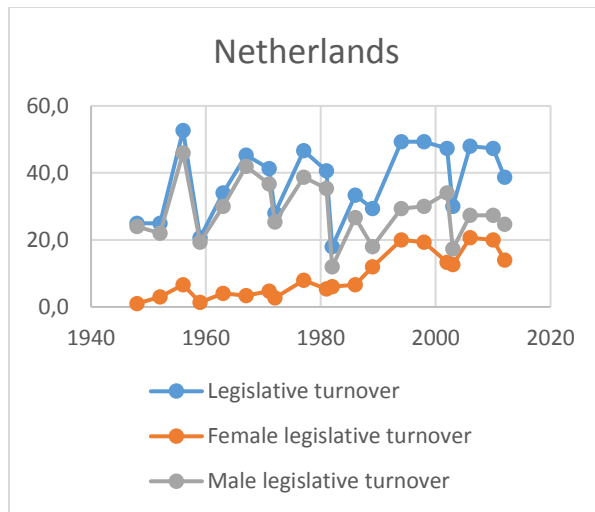
<sup>6</sup> . Our treatment of non-list single member districts is different than that by Carey and Shugart's (1995), who treat them as closed list ones where incentives for personal vote are weak. It is nevertheless consistent with numerous studies in the literature, which argue that the personal characteristics of candidates in non-list single member districts provide strong incentives for the cultivation of a personal vote (Wallack et al. 2003, Matland and Studlar 2004, ).

## COMPARATIVE TRENDS IN AGGREGATE AND GENDER TURNOVER 1945-2015

In Figure 1, we plot the historical evolution of female legislative turnover and compare it with that of male and aggregate legislative turnover.

Figure 2: Comparative trends in total, female and male legislative turnover 1945-2015





A first general observation is that the number of new male legislators follows very closely the general aggregate turnover trend. Indeed the Pearson correlation coefficient reveals a highly significant ( $p < 0.01$ ) positive association between male and aggregate legislative turnover (0.846). This corroborates our initial suspicion that explanations of legislative turnover at the aggregate level may be mirroring the male dimension of the representative elite production process. A second observation is that female legislative turnover also follows the general trend. The Pearson correlation coefficient shows a significant ( $p < 0.01$ ) positive association between female and aggregate turnover. Evidently, as new women legislators enter the legislature aggregate turnover increases. However, the correlation is much lower (0.497) than in the case of male legislative turnover. This is a first indication that although male and female turnover are part of the same general phenomenon, they also project crucial differences. This is further corroborated by the Pearson correlation coefficient between female and male turnover, which shows a non-significant negative association (-0.016) between the two measures.

## RESULTS

### Total legislative turnover

We started our analysis with a control regression on total legislative turnover. Table 2 reports the results of the hierarchical regression as the four blocks (models) and their associated predictors are hierarchically introduced in the analysis.

*Table 2: Determinants of total legislative turnover 1945-2015*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3,661	4,421		0,828	0,409
MP remuneration to GNI per head	0,917	0,402	0,166	2,280	0,024
Duration of electoral term	0,012	0,002	0,378	5,291	0,000
Strength of bicameralism	3,700	2,003	0,136	1,847	0,067
Regional Authority Index	0,633	0,131	0,358	4,816	0,000
2 (Constant)	20,310	6,478		3,135	0,002
MP remuneration to GNI per head	0,768	0,379	0,139	2,027	0,045
Duration of electoral term	0,010	0,002	0,330	5,051	0,000
Strength of bicameralism	7,910	1,989	0,290	3,976	0,000
Regional Authority Index	0,267	0,135	0,151	1,984	0,049
Seats by Leftist Parties	-0,252	0,093	-0,192	-2,703	0,008
Diffusion of Gender Quotas	0,156	0,029	0,386	5,458	0,000
3 (Constant)	5,776	5,307		1,088	0,278
MP remuneration to GNI per head	0,719	0,297	0,130	2,425	0,017
Duration of electoral term	0,008	0,002	0,249	4,800	0,000
Strength of bicameralism	6,596	1,565	0,242	4,215	0,000
Regional Authority Index	0,431	0,107	0,244	4,033	0,000
Seats by Leftist Parties	-0,100	0,075	-0,076	-1,337	0,183
Diffusion of Gender Quotas	0,045	0,025	0,111	1,763	0,080
Electoral Volatility V	0,981	0,105	0,546	9,373	0,000
4 (Constant)	3,940	5,359		0,735	0,464
MP remuneration to GNI per head	0,824**	0,289	0,149	2,849	0,005
Duration of electoral term	0,009***	0,002	0,276	5,334	0,000
Strength of bicameralism	7,936***	1,705	0,291	4,655	0,000

Regional Authority Index	0,386***	0,118	0,218	3,287	0,001
Seats by Leftist Parties	-0,084	0,073	-0,064	-1,152	0,251
Diffusion of Gender Quotas	0,061*	0,025	0,151	2,451	0,016
Electoral Volatility V	0,913***	0,104	0,509	8,785	0,000
First Tier Mean District Magnitude	0,038**	0,014	0,153	2,782	0,006
Strength of Personal Vote	-1,307	1,595	-0,054	-0,819	0,414

Dependent Variable: Legislative turnover

Note:  $R^2 = .308$  for Model 1,  $\Delta R^2 = .138$  ( $p < .001$ ) for Model 2,  $\Delta R^2 = .216$  ( $p < .001$ ) for Model 3,  $\Delta R^2 = .027$  ( $p < .01$ ) for Model 4

\*Significant at .05 level; \*\*Significant at .01 level; \*\*\*Significant at .001 level, two tailed test.

The analysis corroborates the findings of Gouglas et al. (2016) according to which electorates and the structure for political career opportunities are the most important factors in explaining aggregate legislative turnover, followed by political parties and electoral systems. A difference to the Gouglas et al. (2016) analysis is that the structure of political opportunity appears to add more to the explanation of legislative turnover than electorates. A reason for this could be differences in the operationalization of certain variables and the reduced sample size. In terms of predictors, we observe that higher wages in the political sector increase total turnover by creating an entry effect. Length of the legislative term has a significant positive association with total turnover. Moreover, strong bicameral chambers increase as do also strong multilevel polities, where regional authority is high. Political party ideology does not have an impact on total turnover. From the party related variables it is only the diffusion of gender quotas across parties that positively influence turnover rates. As expected, electoral volatility increases turnover. However, from the two electoral system variables only district magnitude projects a significant positive association with total turnover. Strength of personal vote is not significant.

### **Male legislative turnover**

We continued our analysis with a second control regression, this time on male legislative turnover. Table 3 reports its results. A first interesting observation is that electoral systems don't matter. What seems to matter most is the structure of political career opportunities and electorates, followed somewhat by political party factors. When it comes to specific predictors, again, a first observation is that none of our electoral system relevant hypotheses is confirmed. Specific electoral system characteristics seem to be irrelevant when it comes to male legislative turnover. On the contrary, electoral volatility is significant and has the sole biggest substantive impact on male turnover in comparison to other predictors. In addition all the structure for political career opportunities related hypotheses are confirmed. The significance and direction of the predictors MP wages, length of term, strength of bicameralism and regional authority reflect the direction and significance of those variables when regressed on total legislative turnover. Finally, political parties also appear to create significant, though much smaller, effects on male turnover. Progressive party ideology slightly decreases the influx of new men MPs in the legislature, while gender quotas too have a significant, but substantively small, negative association with male turnover.



Table 3: Determinants male legislative turnover 1945-2015

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2,334	3,591		,650	,517
MP remuneration to GNI per head	1,612	,327	,347	4,934	,000
Duration of electoral term	,010	,002	,371	5,363	,000
Strength of bicameralism	5,331	1,627	,233	3,276	,001
Regional Authority Index	,326	,107	,220	3,059	,003
2 (Constant)	19,279	5,589		3,449	,001
MP remuneration to GNI per head	1,261	,327	,271	3,862	,000
Duration of electoral term	,010	,002	,376	5,607	,000
Strength of bicameralism	7,741	1,716	,338	4,510	,000
Regional Authority Index	,183	,116	,123	1,573	,118
Seats by Leftist Parties	-,310	,080	-,282	-3,857	,000
Diffusion of Gender Quotas	,012	,025	,035	,482	,630
3 (Constant)	7,979	4,846		1,646	,102
MP remuneration to GNI per head	1,224	,271	,263	4,518	,000
Duration of electoral term	,008	,001	,301	5,340	,000
Strength of bicameralism	6,719	1,429	,293	4,702	,000
Regional Authority Index	,310	,098	,209	3,178	,002
Seats by Leftist Parties	-,192	,068	-,175	-2,812	,006
Diffusion of Gender Quotas	-,074	,023	-,220	-3,226	,002
Electoral Volatility V	,763	,096	,506	7,980	,000
4 (Constant)	5,522	5,050		1,093	,276
MP remuneration to GNI per head	1,271***	,273	,273	4,663	,000
Duration of electoral term	,007***	,002	,285	4,900	,000
Strength of bicameralism	5,775***	1,607	,252	3,595	,000
Regional Authority Index	,391***	,111	,264	3,532	,001
Seats by Leftist Parties	-,180**	,068	-,163	-2,624	,010
Diffusion of Gender Quotas	-,073**	,023	-,217	-3,127	,002
Electoral Volatility V	,734***	,098	,487	7,489	,000
First Tier Mean District Magnitude	,016	,013	,077	1,244	,216
Strength of Personal Vote	2,293	1,503	,113	1,526	,129

Dependent Variable: Male legislative turnover

Note:  $R^2 = .353$  for Model 1,  $\Delta R^2 = .0063$  ( $p < .001$ ) for Model 2,  $\Delta R^2 = .185$  ( $p < .001$ ) for Model 3,  $\Delta R^2 = .008$  ( $p < .244$ ) for Model 4

\*Significant at .05 level; \*\*Significant at .01 level; \*\*\*Significant at .001 level, two tailed test.

### Female legislative turnover

Table 4 summarizes the output of our third and main analysis. The results are revealing. When it comes to the entry of new women legislators in parliament it is political parties that matter most. The structure for political career opportunities comes second, followed by the electoral system. Electorates, though significant, have a very small effect on female turnover. The results are equally telling when we look at the effects of specific predictors. Both political party related hypotheses were confirmed. An increase in seats held by progressive parties in parliament increases the influx of new women lawmakers. Gender quotas have the most substantive effect in explaining female turnover in comparison to the other predictors. Moving to the structure of opportunity our results are equally interesting. To begin with MP wages appear to decrease female turnover. High wages in the politics sector have a negative impact on the influx of new women legislators in parliament. This is the opposite to the entry effect observed at the aggregate assembly level and in regards to male legislative turnover. Second, the duration of the legislative term does not affect female turnover. Duration of term does not impact the entry of new women legislators in parliament. Third, the hypothesis that strong bicameral systems increase female turnover is confirmed, but the hypothesis that regional authority increases female turnover is not. Moving to electorates, the predictor electoral volatility has a significant positive correlation with female turnover. The hypothesis is confirmed. It is electoral systems, though, rather than electorates that are more important when it comes to female turnover. In terms of specific predictors, district magnitude increases female turnover. Its effect is substantive but not as big as that of strength of personal vote. Personal vote decreases female turnover by almost 3.5%, having the second most substantive effect after gender quotas.

Table 4: Determinants female legislative turnover 1945-2015

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1,416	2,452		0,578	0,564
MP remuneration to GNI per head	-0,696	0,223	-0,242	-3,118	0,002
Duration of electoral term	0,002	0,001	0,124	1,626	0,106
Strength of bicameralism	-1,487	1,111	-0,105	-1,338	0,183
Regional Authority Index	0,305	0,073	0,331	4,183	0,000
2 (Constant)	1,293	2,852		0,453	0,651
MP remuneration to GNI per head	-0,500	0,167	-0,174	-2,996	0,003
Duration of electoral term	0,000	0,001	0,023	0,419	0,676
Strength of bicameralism	0,326	0,876	0,023	0,372	0,710
Regional Authority Index	0,083	0,059	0,090	1,401	0,163
Seats by Leftist Parties	0,055	0,041	0,080	1,333	0,185

	Diffusion of Gender Quotas	0,143	0,013	0,681	11,378	0,000
3	(Constant)	-1,941	2,840		-0,683	0,496
	MP remuneration to GNI per head	-0,510	0,159	-0,177	-3,213	0,002
	Duration of electoral term	0,000	0,001	-0,011	-0,214	0,831
	Strength of bicameralism	0,034	0,837	0,002	0,040	0,968
	Regional Authority Index	0,119	0,057	0,130	2,090	0,038
	Seats by Leftist Parties	0,088	0,040	0,130	2,211	0,029
	Diffusion of Gender Quotas	0,118	0,014	0,564	8,730	0,000
	Electoral Volatility V	0,218	0,056	0,234	3,897	0,000
4	(Constant)	-1,367	2,523		-0,542	0,589
	MP remuneration to GNI per head	-0,452***	0,136	-0,157	-3,317	0,001
	Duration of electoral term	0,001	0,001	0,067	1,436	0,153
	Strength of bicameralism	2,303**	0,803	0,162	2,870	0,005
	Regional Authority Index	-0,005	0,055	-0,005	-0,089	0,929
	Seats by Leftist Parties	0,093**	0,034	0,136	2,709	0,008
	Diffusion of Gender Quotas	0,134***	0,012	0,637	11,395	0,000
	Electoral Volatility V	0,179***	0,049	0,192	3,657	0,000
	First Tier Mean District Magnitude	0,022***	0,006	0,173	3,477	0,001
	Strength of Personal Vote	-3,563***	0,751	-0,282	-4,746	0,000

Dependent Variable: Female legislative turnover

Note:  $R^2 = .213$  for Model 1,  $\Delta R^2 = .39$  ( $p < .001$ ) for Model 2,  $\Delta R^2 = .04$  ( $p < .001$ ) for Model 3,  $\Delta R^2 = .103$  ( $p < .001$ ) for Model 4

\*Significant at .05 level; \*\*Significant at .01 level; \*\*\*Significant at .001 level, two tailed test.

## DISCUSSION OF RESULTS - CONCLUSION

In the present study we tried to explain the causes of female legislative turnover in the unicameral or lower chambers of eight European democracies in the period from 1945 to 2015. Do explanations of legislative turnover differ by gender? Our theoretical starting point was political elite circulation and legislative turnover theories, in particular the idea by Best and Cotta (2000) that turnover can be conceptualised as the outcome of a ‘representative elite production process’. Following Gouglass et al. (2016) we argued that this outcome is influenced by four main factors: the structure for political career opportunities, which shapes the supply of contenders; political parties, which shape the demand for candidates; voters, which shape the demand for legislators; and electoral systems, which structures the choices by all of the above actors and match supply and demand.

Although female and male turnover are part of a representative elite production process and share many similarities, we hypothesized that they must also differ significantly. General explanations of legislative turnover are suspect of mirroring explanations of male only turnover. The reason for this is that they are associated with legislatures that for their most part in the 20<sup>th</sup> century have been male dominated, their gender synthesis only changing very gradually. In view

of this, we suggested a theory of female legislative turnover taking into account a series of fundamental hypotheses from the female representation literature. We anchored these hypotheses in every element of the representative elite production process. In respect to contender choices we hypothesized that female turnover is influenced by the fact that women exhibit less political career ambition than men, but value more policy influence than men do. In respect to political parties we hypothesized that the influx of new women to parliament is influenced by the degree to which party level institutions remedy against ‘male conspiracy’ and ‘outgroup’ effects, while male turnover is sensitive to equality policies. In respect to voters we hypothesized that female turnover is influenced by levels of voter hostility against female candidates. Finally, in respect to the electoral system we hypothesized that it can both advantage and disadvantage women and men candidates respectively. We anchored nine predictors within this framework, known from the legislative turnover and female representation literatures, and described the causal link of each one with total, male and female turnover.

Using data that we collected first hand we mapped the historical rates of total, male and female turnover across country across time and tested nine predictors using OLS hierarchical-blockwise entry regression. The results are revealing. The causes of female differ to those of male and total turnover. Total and male turnover are influenced more by electorates and the institutional context of political careers. Female turnover is primarily influenced by political parties and electoral systems, the structure of political career opportunities, though somewhat differently than men, and to a much lesser extent electorates.

### **The structure of opportunity: different levels of importance and different logics of causality across genders**

The analysis revealed that the institutional context of political careers is the most fundamental factor explaining variability in both total and male legislative turnover rates. Higher wages, strong bicameral assemblies and multi-level polities with high regional authority increase the influx of new legislators in general, and male only newcomers in particular. Lengthy terms decrease aggregate and male legislative turnover. On the contrary, the effects of the structure for career opportunities on the influx of new women legislators is second in importance, the effects of the tested variables somewhat different, while not all of them are important. To begin with, the strong negative association between MP wages and female turnover shows that new women entries are much more disadvantaged by a) incumbency advantage effects created by high wages in the political sector and b) increased political competition by non-incumbent men wanting to come into legislative politics due to rising wages. Second, lengthier legislative terms do not seem to influence the influx of new women legislators. In the future it would be interesting to know whether they are associated with higher incumbent retention rates than those of men. Third, strong bicameral chambers increase female turnover, but multi-level polities with high regional authority seem to have no effect on the influx of new women legislators. It is difficult to say whether women value more policy influence than political career advancement from these findings. We could, nevertheless, speculate that women politicians appear to perceive a strong upper chamber as an arena of expanded policy influence in comparison to a strong region.

### **Parties and the conditions for female advantage**

The role of political parties is significant, but not the most substantive when it comes to explaining total and male legislative turnover rates. On the contrary, the role of political parties in remedying ‘outgroup’ effects explains almost 40% of the variance in female legislative

turnover. Two main observations in regards to the tested predictors. First, party ideology does not appear to influence the total turnover rate. Evidently this happens because gender related effects cancel each other out and are neutralized when measured at the assembly level. This corroborates the finding by Francois and Grossman (2015) and Gouglas et al. (2016) that the aggregate assembly level might not be the ideal level of analysis of political party effects on turnover. The decomposition by gender reveals that progressive parties facilitate the entry of new women MPs in parliament, while they have the exact opposite effect when it comes to the entry of new men MPs. The effect on facilitating the entry of new women in parliament is more substantive than that of preventing new male MPs from entering the legislature. Second, the diffusion of gender quotas across parties, irrespective of party ideological disposition, increases the entry of female MPs in parliament, while it reduces that of men. From all tested predictors, the diffusion of gender quotas across parties has by far the biggest substantive impact on female turnover. While substantive, the negative effect of gender quotas on male turnover is only sixth in comparison to other tested predictors. This in turn may show that significant part of female turnover occurs among women themselves. While positive for descriptive representation this can be problematic for the substantive one.

### **Electorates and women's need for a 'performance premium'**

When introduced in the model electorates add the second biggest change in R-square in the case of both total and male turnover, but they are last when it comes to explaining variance in female legislative turnover. In terms of predictors, electoral volatility produces the most substantive effects on total and male turnover and only the third most substantive for female turnover. Overall, swings in voter party preferences increase the numbers of new male MPs by almost three times more in comparison to female newcomers. One interpretation of this could be that in the face of changing electoral tides new women candidates are easier to defeat than their male counterparts while female incumbents are also more vulnerable. Although this does not constitute voter antipathy toward women candidates, it is perhaps evidence of the extra effort, the 'performance premium' as Anzia and Berry (2011) termed it, that women need to put to get elected.

### **Electoral systems and incumbency (dis)advantage**

The entry of new women legislators into parliament appears to be more sensitive to electoral system attributes in comparison to the entry of men newcomers. As a matter of fact the electoral system appears to have no significant effect on male turnover. On the contrary, electoral systems appear to be paramount for the entry of women non-incumbents. As hypothesized their effects can both advantage and disadvantage women. To begin with, strong personal vote systems decrease the influx of new women legislators, but has no effect on men. This we argue could be an indication of voter bias. It appears as if in strong personal vote systems men non-incumbents are in position to overcome incumbency advantage by benefiting from the higher female incumbent vulnerability. On the contrary, women non-incumbents appear to be unable to overcome incumbency advantage whether male or female. Contrary to personal vote incentives, the size of district magnitude has the opposite effect for women non-incumbents. The bigger its size the higher the number of new women entering parliament. This corroborates findings from past empirical research according to which higher district magnitude encourages ticket balancing strategies that benefit women (Matland and Brown 1992, Matland 1993). Again district magnitude appears to have no effect on male turnover. In view of the above, it is evident that the

effect of district magnitude on total turnover is primarily a reflection of its effect on female turnover.

To conclude, the present study produced new insights on legislative turnover in established European democracies. To begin with, it confirmed some findings from earlier work on turnover, such as the importance of voter preferences, as well as the role of the institutional context of political careers in shaping the supply of aspirants and incumbent mobility in and out of the political market. In addition, it took a step at clarifying the causal paths between total turnover and certain variables, especially at the party and electoral system levels. Political ideology for instance does play a role in political alternation in parliaments, but this is usually obfuscated from analyses that focus solely at the aggregate assembly level. District magnitude leads to more membership change, because it increases female turnover thanks to parties' changing electoral strategies. They balance their tickets by prioritising more women. Furthermore, the study also provided some novel insights on the differences between explanations of female and male turnover, which to our knowledge was not shown in a comparative setting before. The influx of new male legislators is influenced more by voter party preferences and the institutional context of political careers. On the contrary the entry of new women lawmakers in parliament is more sensitive on decisions made by political parties and the workings of electoral systems. The political market is important, though somewhat differently than in comparison to men, while electorates appear to be less important. This in turn confirms past findings in the female representation literature. A step in understanding the renewal of female representative elites in parliament has been taken. However, the consolidation of women incumbents' mandate is equally crucial as it impacts substantive representation and the ability of female legislators to make a difference. Thus, future work on gender turnover could focus on gender differences in regards to incumbent failure and/or success rates.

## References

- Andersen, Kristi, and Stuart Thorson. 1984. "Congressional Turnover and the Election of Women." *The Western Political Quarterly* 37 (1): 143–56.
- Anzia, Sarah F., and Christopher R. Berry. 2011. "The Jackie (and Jill) Robinson Effect: Why do Congresswomen Outperform Congressmen?" *American Journal of Political Science* 55 (3): 478–93.
- André, Audrey, Freire, André and Papp, Zsófia. 2014. "Electoral Rules and Legislators' Personal Vote-Seeking." In Kris Deschouwer and Sam Depauw (eds) *Representing the People: A Survey Among Members of Statewide and Substate Parliaments*. ECPR-OUP Comparative Politics. Oxford: OUP.
- Armingeon, Klaus, Isler, Christian, Knöpfel, Laura, Weisstanner, David, Engler, Sarah. 2016. *Comparative Political Data Set 1960-2014*. Bern: Institute of Political Science, University of Berne.
- Best, H. & Cotta, M. (2000). *Parliamentary Representatives in Europe 1848-2000*. Oxford: University Press.

- Black, Jerome, and Lynda Erickson. 2003. "Women Candidates and Voter Bias: Do Women Politicians Need to be Better?" *Electoral Studies* 22 (1): 81–100.
- Bledsoe, Timothy, and Mary Herring. 1990. Victims of Circumstances: Women in Pursuit of Political Office. *American Political Science Review* 84 (1): 213–23.
- Borchert J. (2011). Individual Ambition and Institutional Opportunity: A Conceptual Approach to Political Careers in Multi-Level Systems. *Federal and Regional Studies*, 2, pp.117-140.
- Carey J.M. & Shugart, M.S. (1995). Incentives to Cultivate a Personal Vote: A Rank Ordering of Electoral Formulas. In *Electoral Studies*, 14 (1995), 417–39,
- Carroll, Susan J. 1985. "Political Elites and Sex Differences in Political Ambition: A Reconsideration." *Journal of Politics* 47 (4): 1231–43. Caul, Miki. 1999. "Women's Representation in Parliament." *Party Politics* 5 (1): 79–98.
- Caul, Miki. 2001. "Political Parties and the Adoption of Candidate Gender Quotas: A Cross-National Analysis." *Journal of Politics* 63 (4): 1214–29.
- Costantini, Edmond. 1990. Political Women and Political Ambition : Closing the Gender Gap. *American Journal of Political Science* 34 (3): 741–70.
- Cox, G.W., Morgenstern, S. (1995). The Incumbency Advantage in Multimember Districts: Evidence from the U. S. States. *Legislative Studies Quarterly*, Vol. 20, No. 3 (Aug., 1995), pp. 329-349.
- Collie, Melissa P. 1981. "Incumbency, Electoral Safety, and Turnover in the House of Representatives, 1952-76". *The American Political Science Review*, Vol. 75, No. 1 (Mar., 1981), pp. 119-131
- Crowther, William E. Matonyte, Irmina. 2007. Parliamentary Elites as a Democratic Thermometer: Estonia, Lithuania and Moldova Compared. *Communist and Post-Communist Studies* 40: 281 – 299.
- Dahlerup, D. (2006). *Women, Quotas and Politics*. Routledge 2006.
- Darcy, Robert, and James R. Choike. 1986. "A Formal Analysis of Legislative Turnover: Women Candidates and Legislative Representation." *American Journal of Political Science* 30 (1): 237–55.
- Darcy, Robert. 1988. "The Election of Women to Dail Eireann. A Formal Analysis". *Irish Political Studies* 3:1, 63-76, DOI: 10.1080/07907188808406451.
- Döring, Holger and Philip Manow. (2015). Parliaments and governments database (ParlGov): Information on parties, elections and cabinets in modern democracies. Development version.
- Duverger, M. (1954). *Political Parties: Their Organization and Activity in the Modern State*. London: Methuen.
- Duverger, M. (1955). *The Political Role of Women*. Paris: UNESCO.
- Engstrom, Richard. 1987. "District Magnitude and the Election of Women to the Irish Dail." *Electoral Studies* 6:123-32.

- François, Abel and Grossman, Emiliano. 2015. How to Define Legislative Turnover? The Incidence of Measures of Renewal and Levels of Analysis. *The Journal of Legislative Studies* 21:4: 457-475.
- Foucault, M. 2006. "How Useful Is the Cumul des Mandats for Being Re-Elected? Empirical Evidence from the 1997 French Legislative Elections." *French Politics* 4(3): 292–311.
- Frechette, Guillaume R., Maniquet, Francois, and Morelli, Massimo. 2008. "Incumbents' Interests and Gender Quotas". *American Journal of Political Science*, Vol. 52, No. 4, October 2008, Pp. 891–907.
- Frederick, B. (2007). Political Parties, Self-Perceived Qualifications and Political Ambition, Examining the Role Of Sex in the Candidate Emergence Process for Open U.S. House Seats, Paper presented at the 2007 Annual Meeting of the American Political Science Association (APSA), 30 August- 2 September, Chicago, USA.
- Freidnevall, Lenita. 2003. "Women's Political Representation and Gender Quotas—the Swedish Case." *The Research Program on Gender Quotas—a Key to Equality? Stockholm University Working Paper Series* 2003:2.
- Fox, Richard L., and Jennifer L. Lawless. 2005. "To Run or Not to Run for Office: Explaining Nascent Political Ambition." *American Journal of Political Science* 49 (3): 642–59.
- Gouglas, Athanassios, Maddens, Bart, Brans, Marleen. 2016. "Determinants of Legislative Turnover in Western Europe 1945-2015". *IPSA*, 23-28 July 2016.
- Gouglas Athanassios, Maddens Bart. (2017). Legislative Turnover and its Sources: it's the Selection. *Politics*, <https://doi.org/10.1177/0263395717701161>, 1-12.
- Heinsohn, Till, & Freitag, Marcus. 2012. "Institutional foundations of legislative turnover: A comparative analysis of the Swiss cantons." *Swiss Political Science Review*, 18, 352–370.
- Heinsohn, Till. 2014. "Institutional Determinants of Legislative Turnover in the German State Parliaments: 1947–2012". *The Journal of Legislative Studies*, 20:4, 473-494.
- Hooghe, Liesbet, Marks, Gary, Schakel, Arjan H., Chapman Osterkatz, Sandra, Niedzwiecki, Sara, and Shair-Rosenfield, Sarah. 2016. *Measuring Regional Authority: A Postfunctionalist Theory of Governance*, Vol. I. Oxford: Oxford University Press.
- Htun, M., & Jones, M. (2002). Engendering the right to participate in decision-making: Electoral quotas and women's leadership in Latin America. In N. Craske & M. Molyneux (Eds.), *Gender and the politics of rights and democracy in Latin America* (pp. 32-56). New York: Palgrave.
- Hyneman, Charles S. 1938. Tenure and Turnover of Legislative Personnel. *Annals of the American Academy of Political and Social Science* 195:21-31.
- Inter-Parliamentary Union. 2016. Women in National Parliaments Statistical <http://www.ipu.org>.
- Johnson, Joel W., Wallack, Jessica, S. 2012, "Electoral Systems and the Personal Vote", hdl:1902.1/17901, Harvard Dataverse, V1.



- Karvonen, Lauri. 2004. "Preferential Voting: Incidence and Effects". *International Political Science Review / Revue internationale de science politique* 25:2:203-226.
- Kenworthy, Lane, and Melissa Malami. 1999. "Inequality in Political Representation: A Worldwide Comparative Analysis." *Social Forces* 78 (1): 235–68.
- Krook, Mona Lena. 2009. *Quotas for Women in Politics: Gender and Candidate Selection Reform Worldwide*. New York: Oxford University Press.
- Kuklys, Mindaugas. 2013. Legislative Turnover in the Baltics after 1990: Why Is It so High and What Are the Implications? *Baltic Journal of Political Science* 2:29 – 49.
- Kunovich, S., & Paxton, P. (2005). Pathways to power: The role of political parties in women's national political representation. *American Journal of Sociology*, 111(2), 505-552.
- Lakeman, Enid. 1976. "Electoral Systems and Women in Parliament." *Parliamentarian* 57: 159–62.
- Lawless, J.L. & R. Fox (2005), *It Takes a Candidate: Why More Women Do Not Run for Political Office*, Cambridge University Press.
- Lawless, Jennifer L., and Sean M. Theriault. 2005. "Will She Stay or Will She Go ? Career Ceilings and Women's Retirement from the U.S. Congress. *Legislative Studies Quarterly* 30 (4): 581–96.
- Manow, Philip. 2007. Electoral Rules and Electoral Turnover: Evidence from Germany's Mixed Electoral System. *West European Politics* 30:195-207.
- Marques-Pereira, Bérengère and Patricio Nolasco (eds) (2001) *La representation politique des femmes en Amérique latine*. Paris: L'Harmattan.
- Matland, Richard, and Deborah Dwight Brown. 1992. "District Magnitude's Effect on Female Representation in U. S. State Legislatures." *Legislative Studies Quarterly* 17 (4): 469–92.
- Matland, Richard. 1993. "Institutional Variables Affecting Female Representation in National Legislatures: The Case of Norway." *Journal of Politics* 55 (3): 737–57.
- Matland, Richard, and Donley Studlar. 1996. "The Contagion of Women Candidates in Single-Member Districts and Proportional Representation: Canada and Norway." *Journal of Politics* 58 (3): 707–33.
- Matland, Richard E., and Studlar, Donley T. 2004. Determinants of Legislative Turnover: A Cross-National Analysis. *British Journal of Political Science* 34:149-71.
- Matland, Richard. 1998. "Women's Representation in National Legislatures: Developed and Developing Countries." *Legislative Studies Quarterly* 23 (1): 109–25.
- Moncrief, Gary, F. 1998. "Terminating the Provincial Career: Retirement and Electoral Defeat in Canadian Provincial Legislatures, 1960–1997". *Canadian Journal of Political Science / Revue canadienne de science politique*, Vol. 31, No. 2 (Jun., 1998), pp. 359-372.
- Moncrief, Gary F., Niemi, Richard G., and Powell, Lynda W. 2004. Time, Term Limits, and Turnover: Trends in Membership Stability in U.S. State Legislatures. *Legislative Studies Quarterly* 29:3:357-81.

- Niemi, Richard G., and Winsky, Laura R. 1987. Membership Turnover in U. S. State Legislatures: Trends and Effects of Districting. *Legislative Studies Quarterly* 12:1:115-123.
- Niven, David. 1998. "Party Elites and Women Candidates." *Women & Politics* 19 (2): 57–80.
- Norris, Pippa. 1985. "Women's Legislative Participation in Western Europe." *West European Politics* 8 (4): 90–101.
- Paxton, Pamela, and Sherri Kunovich. 2003. "Women's Political Representation: The Importance of Ideology." *Social Forces* 82 (1): 87–114.
- Paxton, Pamela, Jennifer Green, and Melanie Hughes. 2008. "Women in Parliament, 1945–2003: Cross-National Dataset." The Inter-University Consortium for Political and Social Research. <http://www.icpsr.umich.edu/icpsrweb/ICPSR/studies/24340> (accessed May 30, 2016).
- Pearson, Kathryn, and Eric McGhee. 2013. "What It Takes to Win: Questioning 'Gender Neutral' Outcomes in U.S. House Elections." *Politics and Gender* 9 (4): 439–62.
- Pedersen, M. N. (1979). The dynamics of European party systems: changing patterns of electoral volatility. *European Journal of Political Research* 7: 1-26.
- Pilet, Jean-Benoît, Tronconi, Filippo, Onate, Pablo, Verzichelli, Luca. 2014. "Career Patterns in Multilevel Systems". In Kris Deschouwer and Sam Depauw (eds) *Representing the People: A Survey Among Members of Statewide and Substate Parliaments*. ECPR-OUP Comparative Politics. Oxford: OUP.
- Pilet, J.N., Renwick, A., Núñez, L. Reimink, E., Simón P. (2016). *Database of Electoral Systems*. 2016.
- Pruysers, Scott, and Blais, Julie. 2016. "Why Won't Lola Run? An Experiment Examining Stereotype Threat and Political Ambition". *Politics and Gender*, online view doi:10.1017/S1743923X16000544
- Quota Database (2016). Global database of quotas for women. Available from <http://www.quotaproject.org>, accessed December 2016.
- Ray, David. 1974. Membership Stability in Three State Legislatures: 1893-1969. *The American Political Science Review* 68:1:106 – 112.
- Ray, David. 1974. Membership Stability in Three State Legislatures: 1893-1969. *The American Political Science Review* 68:1:106 – 112.
- Reynolds, A. (1999). Women in the legislatures and executives of the world: Knocking at the highest glass ceiling. *World Politics*, 51(4), 547-572.
- Rosen, Jennifer. 2012. "The Effects of Political Institutions on Women's Political Representation: A Comparative Analysis of 168 Countries from 1992 to 2010." *Political Research Quarterly* 66 (2): 306–321.
- Rosenthal, Alan. 1974. Turnover in state legislatures. *American Journal of Political Science* 18:3: 609-616.

- Rule, Wilma. 1981. "Why Women Don't Run: The Critical Contextual Factors in Women's Legislative Recruitment." *Western Political Quarterly* 34 (1): 60–67.
- Rule, Wilma. 1987. "Electoral Systems, Contextual Factors, and Women's Opportunity for Election to Parliament in Twenty-Three Democracies." *Western Political Quarterly* 40 (3): 477–98.
- Schlesinger, Joseph A. 1966. *Ambition and Politics: Political Careers in the United States*. Chicago: Rand McNally.
- Smith, Eric R. A. N., and Richard L. Fox. 2001. "The Electoral Fortunes of Women Candidates in Congress." *Political Research Quarterly* 54 (1): 205–21.
- Somit, Albert, Wildenmann, Rudolf, Boll, Bernhard, and Römmele, Andrea. 1994. *The Victorious Incumbent: A Threat to Democracy?* Aldershot: Dartmouth.
- Squire, Peverill. 1998. Career Opportunities and Membership Stability in Legislatures. *Legislative Studies Quarterly* 13:1:65-82.
- Squire, Peverill. 2007. "Measuring State Legislative Professionalism: The Squire Index Revisited". *State Politics & Policy Quarterly*, Vol. 7, No. 2 (Summer, 2007), pp. 211-227
- Swain John, W., Borrelli, Stephen, A., Reed, Brian, C. 2000. "A new look at turnover in the U.S. House of Representatives, 1789–1998". *American Politics Quarterly* 28(1): 435–57.
- Thames, Frank, and Margaret Williams. 2010. "Incentives for Personal Votes and Women's Representation in Legislatures." *Comparative Political Studies* 43 (12): 1575–1600.
- Thames, Frank. 2016. Understanding the Impact of Electoral Systems on Women's Representation. *Politics & Gender*, online doi:10.1017/S1743923X16000325.
- Tripp, Aili Mari, and Alice Kang. 2008. "The Global Impact of Quotas: On the Fast Track to Increased Female Legislative Representation." *Comparative Political Studies* 41 (3): 338–61.
- Wallack, Jessica, S., Gaviria, Alejandro, Panizza, Ugo, Stein, Ernesto. 2003. "Particularism around the world". *The World Bank Economic Review*, vol. 17, no. 1, 133-144.
- Vanlangenakker, I., Maddens, B. & Put, G. (2013). Career Patterns in Multi-Level States: an Analysis of the Belgian Regions. *Regional Studies*, published online.
- Verzichelli, Luca. 2014. Degradable Elites? Modes and Factors of Parliamentary Turnover in the Early XXI Century. Paper presented at the Conference 'Farewell to the Elites?', Jena 25-26 September 2014.